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ABSTRACT

Total higher education enrollment in fall 1989 is projected at 13.1 million, nearly 2% over the previous year. Full-time enrollment is expected to remain around 7.4 million, with part-time enrollment increasing from 5.5 million in 1988 to 5.7 million in 1989. Enrollment at public institutions will rise from 10.0 million in 1988 to 10.2 million in 1989; at private colleges enrollment will be 2.9 million, up from 2.8 million. At four-year institutions, enrollment is projected to increase from 8.0 million (1988) to 8.2 million (1989). In the next five years, total enrollment will fluctuate, ending with 13.0 million in 1993. Public institution enrollment will be 10.2 million in 1993, and enrollment at private institutions will be about 2.9 million. Part-time students are expected to number 5.8 million. In 1993, undergraduate enrollment is projected at 11.2 million, graduate enrollment at 1.6 million, and first-professional enrollment at 283,000. These data are also displayed in tables, and notes on survey methodology are provided. (MSE)

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NATIONAL CENTER FOR EDUCATION STATISTICS

Targeted Forecast

July 1989

Higher Education Enrollment: Fall 1987 to Fall 1993

1989 Higher Education Enrollment

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The National Center for Education Statistics (NCES) projects that total enrollment in institutions of higher education will be 13.1 million in fall 1989, nearly 2 percent more than the estimated 12.8 million college students enrolled in 1988.

Although the number of full-time students is projected to remain around 7.4 million, NCES forecasts that part-time enrollment will increase from 5.5 million in 1988 to 5.7 million in 1989.

Enrollment at public institutions is projected to rise from 10.0 million in 1988 to 10.2 million in 1989. Enrollment in private colleges is projected to be 2.9 million in 1989. An estimated 2.8 million students enrolled in private institutions in 1988.

At 4-year institutions, enrollment is projected to increase from 8.0 million in 1988 to 8.2 million in 1989.

5-Year Outlook

In the next 5 years (1989 through 1993), NCES projects that total enrollment in institutions of higher education will fluctuate, ending with 13.0 million in 1993.

Data Series:
TF-89-3.1

Enrollment at public institutions is projected to be 10.2 million in 1993; enrollment at private institutions will be around 2.9 million.

The number of part-time students is expected to be 5.8 million in 1993.

In 1993, undergraduate enrollment is projected to be 11.2 million, graduate enrollment 1.6 million, and first-professional enrollment 283,000.

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U. S. Department of Education
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CS 89-644

Forecast

Higher education enrollment, by student characteristics, with forecasts: Fall 1987 to fall 1993

(In thousands)

Status of data	Year	Total	Sex of student		Attendance status		Level of enrollment		
			Men	Women	Full-time	Part-time	Undergraduate	Graduate	First professional
Actual	1987	12,768	5,932	6,836	7,232	5,537	11,047	1,451	268
Estimate	1988	12,849	5,946	6,904	7,371	5,478	11,137	1,444	268
Forecast	1989	13,087	5,984	7,103	7,377	5,710	11,275	1,533	279
	1990	13,213	6,010	7,203	7,428	5,785	11,387	1,545	281
	1991	13,233	6,002	7,231	7,378	5,855	11,390	1,561	282
	1992	13,126	5,952	7,174	7,274	5,852	11,284	1,560	282
	1993	13,026	5,920	7,106	7,179	5,847	11,179	1,564	283

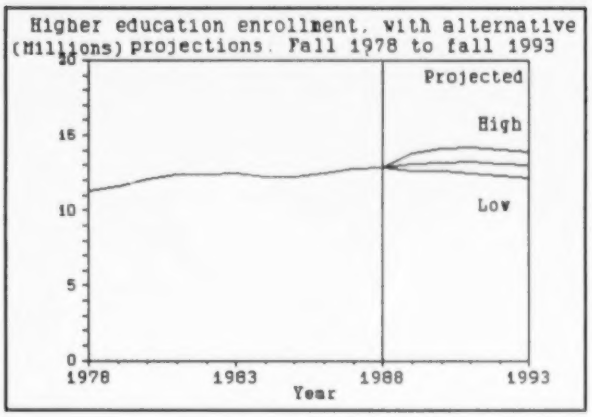
NOTE: Includes 4-year and 2-year institutions of higher education. These forecasts were prepared April 1989. Details may not add to totals due to rounding.

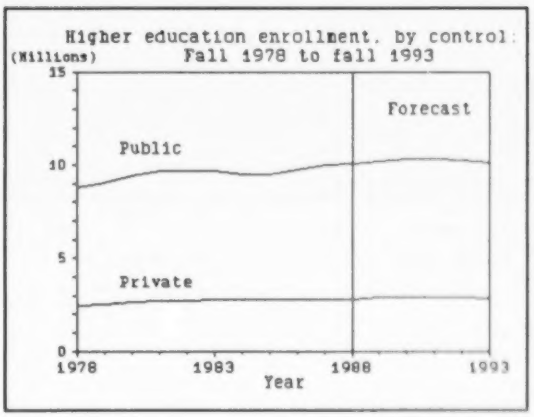
Higher education enrollment, by institutional characteristics, with forecasts: Fall 1987 to fall 1993

(In thousands)

Status of data	Year	Total	Type of institution		Control of institution	
			4-year	2-year	Public	Private
Actual	1987	12,768	7,990	4,776	9,975	2,793
Estimate	1988	12,849	8,027	4,822	10,045	2,804
Forecast	1989	13,087	8,212	4,875	10,188	2,899
	1990	13,213	8,289	4,924	10,291	2,922
	1991	13,233	8,298	4,935	10,308	2,925
	1992	13,126	8,224	4,902	10,228	2,898
	1993	13,026	8,147	4,879	10,154	2,872

NOTE: Includes 4-year and 2-year institutions of higher education. These forecasts were prepared April 1989. Details may not add to totals due to rounding.





Technical Notes

Methodology

Projections of enrollments in institutions of higher education were developed by means of the NCES Interactive Forecasting Model (IFMOD), an age-specific enrollment rate model. For each age group, by sex and attendance status, enrollment rates were calculated and projected into the future. The projections presented in the tables on page 2 are based on the middle alternative assumption. This assumes that the enrollment rates will either remain constant at levels consistent with most recent rates or increase based on past trends. These projected enrollment rates were then applied to age-specific population projections from the Bureau of the Census.

Single exponential smoothing was the projection technique used to forecast the enrollment rates.

Percent changes were calculated using unrounded numbers.

Since projections depend on the properties of the statistical methodologies and the validity of the assumptions made, two other alternative projections were developed for total higher education enrollment to denote the uncertainty involved in making projections. For example, under the low alternative, which assumes constant enrollment rates over the projection period, total higher education enrollment is expected to decrease to 12.2 million by 1993. In contrast, the high alternative assumes an increase in enrollment rates over the projection period, resulting in a rise in enrollment to 13.9 million by 1993.

Alternative projections of total enrollment in institutions of higher education: Fall 1989 to fall 1993

(In thousands)

Year	Low alternative	High alternative
1989	12,653	13,847
1990	12,616	14,099
1991	12,509	14,187
1992	12,323	14,042
1993	12,194	13,920

For further details on the methods used to develop these forecasts, see *Projections of Education Statistics to 2000*, forthcoming.

Forecast Accuracy

The mean absolute percentage error (MAPE) was used to measure forecast accuracy. An analysis of projection errors (differences between actual and projected numbers), based on five editions of *Projections of Education Statistics*, indicates that MAPEs for total enrollment in institutions of higher education were 0.4 percent for 1 year ahead, 2.3 percent for 2 years ahead, and 5.0 percent for 4 years ahead. For the 1-year-ahead prediction, this means that one would expect the forecast to be within 0.4 percent of the actual value, on the average.

Sources of Data

The enrollment data used in these forecasts were obtained from the "Fall Enrollment in Colleges and Universities" survey of the Higher Education General Information Survey (HEGIS), the Integrated Postsecondary Education Data System (IPEDS), and the Higher Education Early National Estimates System conducted by the U.S. Department of Education, National Center for Education Statistics. Population data were obtained from *Current Population Reports*, "Estimates of the Population of the United States," (Series P-25) and unpublished tabulations by the U.S. Department of Commerce, Bureau of the Census.

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